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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,322	06/13/2001	Walter H. Runkis		5476

7590 06/25/2003
Walter H. Runkis
78 Lantern Drive
Monroe, CT 06468

EXAMINER

CLARDY, S

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 06/25/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/880,322

Applicant(s)
Runkis

Examiner
S. Mark Clardy

Art Unit
1616



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 29, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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Claims 1-26 are pending in this application which has also been filed as international application PCT/US02/18367.

Applicant's claims are drawn to:

- meth* *of living cells*
1. Compositions (*meth* claims 1-5, 7-12, 14-20) comprising solution stable macronutrients¹ and micronutrients² (p. 4-7). The compositions may be formed by reacting (claim 4) any of various minerals, sulfamates (HSO_3NRR), and amine-sulfamates ($\text{R(NRR)}_n \cdot n \text{HSO}_3\text{NRR}$; $n = 1$ to 3).
 2. CO_2 . (Claims 6, 13).
 3. Methods of making the fertilizer compositions (claims 21-26)

3K Applicant is advised that should claims 1-5 be found allowable, claims 7-10, 12, and 14-18 will be objected to under 37 CFR 1.75 as being substantial duplicates thereof. Similarly, claim 13 will be objected to as being a duplicate of claim 6. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

The duplicate claims refer to how the compositions may be used, but do not further limit the compositions themselves. Merely stating an end use does not further limit a composition claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

¹includes both the conventional primary nutrients, NPK, and secondary nutrients, Ca, S, and Mg

²Fe, Mn, B, Zn, Cu, Mo, Cl, Na (for halites), Co, Ni

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A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

g k
Claims 6 and 13 are rejected under 35 U.S.C. 102(a), (b), and (e) as being anticipated by Elledge (US 1,482,367). Elledge teaches that carbon dioxide was a known compound. Applicant's claims read on substantially pure carbon dioxide; it is irrelevant how the known compound is made.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-5, 7-12, and 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Newsom, Jr. (US 4,383,846), Woodhouse (US 2,237,826), Facer (US 2,739,886), and John Deere³.

Newsom, Jr. teaches fertilizer compositions comprising ammonium and phosphate (column 3), and that N-substituted sulfamic acid derivatives are useful for stabilizing fertilizer compositions (col 4, lines 20-35).

³John Deere. *Fundamentals of Machine Operation*. Chapter 2, "Fertilizers and Lime". P. 15-35. 1976.

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Woodhouse teaches the addition of sulfamic acid or salts thereof to fertilizer compositions comprising ammonium, phosphate, and other conventional fertilizer materials.

Facer teaches that applicant's macronutrient and micronutrient components were known in the fertilizer art, and that such materials may be derived from naturally occurring minerals.


John Deere teaches that it is conventional in the art to combine primary, secondary, and micronutrients in fertilizer compositions.

One of ordinary skill in the art would be motivated to combine these references because they disclose the utility of known fertilizer components in fertilizer compositions.

Thus it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have combined applicant's conventional fertilizer components in a single fertilizer composition because it is conventional in the fertilizer art to do so as taught in the prior art. Further, Newsom, Jr. teaches that the addition of applicant's sulfamic acid derivatives results in a stabilized composition.

No unobvious or unexpected results are noted; no claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is (703) 308-4550.


S. Mark Clardy
Primary Examiner
AU 1616

June 23, 2003